

**REMARKS**

This is intended as a full and complete response to the Office Action dated June 22, 2004 having a shortened statutory period for response set to expire on September 22, 2004. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-3, 10, 19-29, and 31-58 are pending in the application. Claims 31 and 32 are allowed. Claims 1-3, 10, 19-29, and 33-58 are rejected. Applicant has canceled claims 4-9, 11-18, 30, 41, and 43 without prejudice and amended claims 1-3, 10, 19-23, 29, 33-40, 42, and 44-58. Applicant requests reconsideration of the rejected claims.

Claims 1-3, 22-23, 29, 33-35, 41, 48-52, and 56-58 stand rejected under 35 U.S.C. § 102(e) as anticipated by *Castano-Mears et al.* (U.S. Patent Number 6,457,518). Claims 36-40 stand rejected under 35 U.S.C. § 103(a) as unpatentable over *Castano-Mears et al.* The Examiner states that *Castano-Mears et al.* discloses in Figures 5-7 an expandable well screen (designated by number 60) having inner and outer walls, a perforated base pipe, and a filter media (designated by number 66) that envelops the base pipe. The Examiner states that the connectors (designated by number 72) create a convenient location within the outer wall of the expandable well screen which may be utilized as a recess for communication lines (designated by number 74).

Claims 10, 19-21, 24-28, 42-47, and 53-55 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Castano-Mears et al.* in view of *Pringle et al.* (U.S. Patent Number 5,542,472). The Examiner states that *Castano-Mears et al.* does not disclose a deformable encapsulation or the recess geometries claimed. The Examiner uses *Pringle et al.* in combination with *Castano-Mears et al.* to reject the above claims, stating that *Pringle et al.* in the Abstract and Figures 9-12 discloses communication lines (designated by number 58f) enveloped by a deformable encapsulation (designated by number 68) that is disposed within a recess (designated by number 14f) in an outer wall of coiled tubing (designated by number 12f). The Examiner states that it would have been obvious to a person having ordinary skill in the art to modify the well screen of *Castano-Mears et al.* to reflect a recess in the outer wall possessing a cross-sectional geometry for receiving a deformable encapsulation of complimentary cross-sectional

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geometry, as taught by *Pringle et al.*, to protect communication lines from damage and provide an inexpensive attachment means for the line-embedded encapsulation.

Applicant respectfully traverses the rejection to claims 1-3, 10, 19-29, 33-40, 42, and 44-58. Applicant respectfully submits that *Castano-Mears et al.* does not disclose an expandable sand screen having a recess within a wall of an outer shroud, as recited in claims 1-3, 10, 19-29, 33-40, 42, and 44-58. Rather, *Castano-Mears et al.* teaches filtering media 66 wrapped helically about a base pipe 62, see *Castano-Mears et al.* at col. 7 Ins. 26-28, and a connector 72 welded between adjacent filter media wraps to provide a location for lines 74 within the filter media 66. See *id.* at col. 7 Ins. 51-54.

Furthermore, Applicant respectfully submits that *Pringle et al.* does not disclose an expandable sand screen having a recess within a wall of an outer shroud, as recited in claims 1-3, 10, 19-29, 33-40, 42, and 44-58. *Pringle et al.* instead teaches a signal transmission passageway in coiled tubing, see *Pringle et al.* at col. 1 Ins. 25-32, where the coiled tubing is not expandable and does not include an outer shroud.

Therefore, Applicant respectfully submits that *Castano-Mears et al.*, alone or in combination with *Pringle et al.*, does not teach, show, or suggest an expandable sand screen, comprising a base pipe layer; a filtering media layer around the base pipe layer; and an outer shroud around the filtering media layer, a wall of the outer shroud having a recess formed therein, the recess defining a housing for one or more of the following during expansion of the expandable sand screen: control lines, instrumentation lines, fiber optics, and downhole sensors, wherein the recess moves outward radially upon expansion of the expandable sand screen, as recited in claim 1 and its dependent claims 2-3, 10, 19-21, 33-40, 42, and 44-49. Applicant further respectfully submits that *Castano-Mears et al.*, alone or in combination with *Pringle et al.*, does not teach, show, or suggest an apparatus for use in well completion operations, comprising an expandable sand screen comprising a base pipe layer, a filtering media layer around the base pipe layer, and an outer shroud around the filtering media layer; and one or more of the following located within a wall of the outer shroud: control lines, instrumentation lines, fiber optics, and downhole sensors, wherein the one or more of the following located within the wall of the outer shroud is protected during the expansion process when an inner wall of the expandable sand screen increases in diameter, as recited in claim 22 and its dependent claims 23-28.

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Moreover, Applicant respectfully submits that *Castano-Mears et al.*, alone or in combination with *Pringle et al.*, does not teach, show, or suggest a method for controlling at least one downhole tool or instrument through an expandable sand screen from a surface of a wellbore, comprising providing the expandable sand screen in the wellbore, the expandable sand screen having a first inner diameter and comprising a base pipe layer, a filtering media layer around the base pipe layer, and an outer shroud around the filtering media layer, one or more of the following disposable within a recess formed in a wall of the outer shroud: control lines, instrumentation lines, fiber optics, downhole sensors, data acquisition lines, and communication lines; and expanding the expandable sand screen to a second inner diameter, the second inner diameter larger than the first inner diameter, wherein the one or more of the control lines, instrumentation lines, fiber optics, and downhole sensors is protected during the expansion, as recited in claim 29. Furthermore, Applicant respectfully submits that *Castano-Mears et al.*, alone or in combination with *Pringle et al.*, does not teach, show, or suggest an expandable sand screen, comprising a base pipe layer; a filtering media layer around the base pipe layer; and an outer shroud around the filtering media layer, a wall of the outer shroud having a recess formed therein, the recess defining a housing for one or more of the following during expansion of the expandable sand screen: control lines, instrumentation lines, fiber optics, and downhole sensors, wherein a thickness of a wall of the expandable sand screen decreases upon expansion, as recited in claim 50 and its dependent claims 51-55.

Finally, Applicant respectfully submits that *Castano-Mears et al.*, alone or in combination with *Pringle et al.*, does not teach, show, or suggest a method for controlling at least one downhole tool or instrument through an expandable sand screen from a surface of a wellbore, comprising providing the expandable sand screen in the wellbore, the expandable sand screen comprising a base pipe layer, a filtering media layer around the base pipe layer, and an outer shroud around the filtering media layer, one or more of the following disposable within a recess formed in a wall of the outer shroud: control lines, instrumentation lines, fiber optics, downhole sensors, data acquisition lines, and communication lines; and expanding the expandable sand screen, thereby decreasing a thickness of a wall of the sand screen, wherein the one or more of the control lines, instrumentation lines, fiber optics, and downhole sensors is protected

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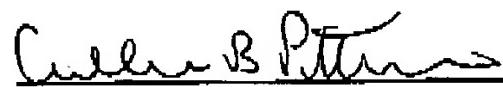
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during the expansion, as recited in claim 56 and its dependent claims 57-58. Therefore, Applicant respectfully requests removal of the rejection to and allowance of claims 1-3, 10, 19-29, and 33-58.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests allowance of the claims.

Respectfully submitted,



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